

Backbone Trail - Mulholland-Yerba Buena Rd
Red Circle: Final Stretch Under Construction
Scale: 1:24,000
February 2, 2006



United States Department of the Interior

NATIONAL PARK SERVICE

Santa Monica Mountains National Recreation Area
401 West Hillcrest Drive
Thousand Oaks, California 91360-4223

IN REPLY REFER TO:

D30(SAMO)

February 2, 2006

Mr. Joseph T. Edmiston, FAICP
Santa Monica Mountains Conservancy
5750 Ramirez Canyon Road
Malibu, California 90265

Dear Joe:

Per our discussion on January 25, 2006 the National Park Service is requesting a \$125,000 grant from the Santa Monica Mountains Conservancy to construct two miles of the Backbone Trail in the Santa Monica Mountains National Recreation Area.

The work consists of preparing environmental compliance, performing field surveys, engineering and staking trail alignment, brushing the alignment, constructing the tread, and constructing drainage structures and retaining walls per NPS trail construction handbook standards. Directional and informational signs will also be installed. The work area consists of steep and rocky terrain between the Etz Meloy Motorway and Encinal Canyon Road in Los Angeles County. The proposed alignment is located on NPS property. We propose to begin construction this spring and complete the project by December 31, 2006.

As we discussed, the grant of funds will enable the park service to redirect other discretionary funds to continue our joint mountain lion study, including collaring additional lions in the Rim of the Valley. This effort will yield useful science to assist both our agencies with management of parklands and wildlife.

Please let me know if you need additional documentation to support this request. Thank you for your consideration.

Sincerely,

Woody Smeck
Superintendent

Conservation Biology of Mountain Lions in the Santa Monica Mountains and Southern California

Winter 2006 – Winter 2007 Research Priorities

Mountain lion research in the Santa Monica Mountains and surrounding areas has yielded exciting and critically important information about wildlife conservation in urban areas. Available support has carried our work through 2005, but in order to continue the research, additional funding is needed. We are currently requesting \$125,000 to support research activities through the end of 2006 and the beginning of 2007. With this support, we will specifically:

- Radio-collar and monitor survival and dispersal of the four young mountain lions during their crucial months of maturity to adulthood.
- Recapture and continue to track P1, the adult male in the Santa Monica Mountains, and locate and radio-collar any new lions in the Santa Monica Mountains and Simi Hills, where anticoagulant poisons pose additional risks.

The overall goal of our work is to understand the ecology and movement patterns of mountain lions in the highly urbanized and fragmented landscape in and around the Santa Monica Mountains. None of the larger blocks of open space in the Santa Monica Mountains and adjacent Simi Hills and Santa Susana Mountains are large enough by themselves to sustain mountain lion populations over the long-term. Consequently, documenting movement and survival through these areas, and particularly whether or not mountain lions can cross major highways, will be critical for developing conservation strategies for this species. Additional background on our targeted goals is described below.

Monitoring survival and dispersal of mountain lion kittens

Since September 2004, we have been radio-tracking a litter of four lion kittens in the Santa Monica Mountains using implanted radio-transmitters. Because these transmitters are approaching the end of their battery life, we are now recapturing the animals and attaching more powerful GPS collars. To date, we have succeeded in radio-collaring three of the four juvenile lions. The GPS collars are already providing us with a great deal of valuable movement data, and ultimately will inform us about dispersal patterns and where the animals settle down. In recent months, the two young males have traveled to the farthest reaches of the Santa Monica Mountains, adjacent to the 405 Freeway to the east (male P8) and out to the agricultural expanse of the Oxnard plain to the west (male P5). So far we have not documented any mountain lions crossing the 101 Freeway.

The next year will be critical for the kittens, particularly the two males, because the Santa Monica Mountains likely do not contain sufficient area for the two young males and P1 to coexist. This is the first time that lion kittens have been monitored from birth to dispersal age in an urban landscape, and we have an unprecedented opportunity to directly observe if and where connectivity exists between the Santa Monica Mountains and adjoining areas of open space.

Tracking mountain lions in the Santa Monica Mountains and Simi Hills

We have thus far located and radio-tracked two adult mountain lions, P1 and P2, in the Santa Monica Mountains, neither of which crossed the 101 Freeway to the Simi Hills. We have an excellent 3-year picture of their movements, activity, home ranges, and food habits. These long-term data give us important information about the suitability of habitat for lions in these mountains, as well as the ability of mountain lions to coexist with people in the challenging landscape of southern California. It is important to follow up on known resident lions, as well as to capture and radio-track other individuals that appear in the Santa Monica Mountains or Simi Hills, particularly ones that may move in across freeways from other large blocks of open space. For example, in the spring of 2004 an uncollared young male mountain lion was killed by a vehicle on Malibu Canyon road, in the middle of the Santa Monica Mountains.

Identifying landscape connectivity and wildlife movement corridors

An important objective of this study is to identify landscape-level linkages and wildlife movement corridors, using mountain lions as indicators for these connections. We currently have an unprecedented opportunity to directly observe if and where connectivity for mountain lions exists between the Santa Monica Mountains and adjoining mountain ranges and open spaces. The GPS data we are collecting delivers fine-scale movements of animals, which will enable us to identify potential wildlife corridors as well as barriers to movement (such as roads or freeways). From this, we can determine whether identified corridors are protected, and whether additional habitats need to be acquired. Animal movement data can also be incorporated into GIS-based models to identify barriers to movement, rank alternative landscape configurations, and estimate optimal configuration of corridors.

Tracking the effects of anticoagulant rodenticides

In fall of 2004, two collared lions in the Simi Hills area died directly from anticoagulant rodenticide poisoning. More recently, testing of P2 (the female mountain lion killed this summer by her former mate, P1) also revealed exposure to anticoagulants. This was surprising and potentially alarming since P2 lived entirely within the Santa Monica Mountains, an area considerably less urban than the Simi Hills. This further underscores the pressing need to monitor and document if and how anticoagulants continue to impact mountain lions and other wildlife species in this region.

All of these issues are critically important for understanding the long-term survival and movement patterns of mountain lions in this region, and will provide information needed for mountain lion conservation in many other areas facing similar threats from urban encroachment.

Budget – immediate needs for the next 12 months (March 1, 2006 – February 28, 2007)

Capture specialist (4 months time) --	\$ 25,000.00
Wildlife Technician (12 months time) --	\$ 55,000.00
Carnivore monitoring interns (2) --	\$ 9,520.00
<i>Stipend: 52 weeks X \$50 week = \$2,600</i>	
<i>Housing: 12 mo. X \$180 month = \$2,160</i>	
Radio-collars (3) --	\$ 12,000.00
Vehicle cost (2) --	\$ 14,000.00
Supplies for trapping/radio-tracking --	\$ 3,480.00
Services (telemetry flights/hound captures)-	\$ <u>6,000.00</u>
Total --	\$125,000.00

These funds will allow us to:

- Continue to track the four young mountain lions in the Santa Monica Mountains this winter and spring when they are establishing their new home ranges or potentially dispersing.
- Recapture the four juvenile lions this summer and refit their radio-collars since they are still growing.
- Recapture and collar P1, the adult male lion in the Santa Monica Mountains that we followed from July 2002 through September 2005.
- Capture and collar other lions that may be located in the Santa Monica Mountains and Simi Hills.

SANTA MONICA MOUNTAINS CONSERVANCY GRANT APPLICATION				
Project Name: Construct Two Miles of the Backbone Trail		Amount of Request: \$ 125,000 Total Project Cost: \$ 2 million		
Applicant Name: National Park Service		Amount of Match: \$ 1.875 million Source of Match: LWCF, TEA-21		
Applicant Address: National Park Service 401 West Hillcrest Drive Thousand Oaks, CA 93065 Phone: (805) 370-2344 Fax: (805) 370-1850		Project Address: Federal parkland between Mulholland Highway and Etz Meloy Motorway		
		County	Senate District	Assembly District
		Los Angeles		
		Email: woody_smeck@nps.gov		
Grantee's Authorized Representative: Woody Smeck, Superintendent (805) 370-2344 <hr/> <i>Name and Title</i> <i>Phone</i>				
Person with day-to-day responsibility for project: John Williams, Chief of Maintenance (805) 370-2327 <hr/> <i>Name and Title</i> <i>Phone</i>				
Brief Scope of Work (60 words maximum): Construct two miles of the Backbone Trail between Mulholland Highway and Etz Meloy Motorway in the Santa Monica Mountains. Work includes installing a complete multiuse trail. All work will be performed by the National Park Service trail crew and will meet NPS Trail Construction Handbook standards. Work will be completed by December 31, 2006.				
Funding Source Applied for:				
Narrative/Project Description: The National Park Service, Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority and California State Parks, among other agencies and stakeholders, have collaborated in planning, acquiring, and building the Backbone Trail in the Santa Monica Mountains. Once completed, the trail will extend 60 miles across the crest of the mountains, linking together over 500 miles of trails and 78,000 acres of public parklands. To date, the agencies have acquired and constructed 57 miles of the 60-mile trail corridor. This project will construct two additional miles of trail between Mulholland Highway and Etz Meloy Motorway in Los Angeles County. The National Park Service has acquired all land parcels necessary to construct the segment, and has completed a preliminary alignment design and all environmental documents (including a federal consistency determination in compliance with the California Coastal Act). The scope of trail construction includes surveying and staking the alignment, conducting a resource and archeological survey of the alignment, brushing the alignment, constructing a pathway for multiple use recreation, and completing all necessary rock work, drainage, and retaining structures.				

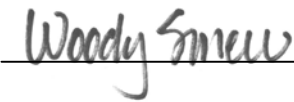
Trail signs will also be installed to assist visitors in using the trail and understanding the unique natural setting.

The trail passes through very steep and rocky terrain, making construction more challenging and costly. The trail will be constructed by the National Park Service Trail Crew and will meet NPS Trail Construction Handbook standards. A map of the proposed construction alignment is attached. All work will be completed by December 31, 2006.

Tasks / Milestones:	Budget:	Completion Date
1 Survey and stake alignment	\$ 3,000	
2 Brush alignment	\$ 15,000	
3 Construct rough pathway	\$ 45,000	
4 Groom pathway	\$ 35,000	
5 Construct retaining walls and drainage	\$ 25,000	
6 Install signs	\$ 2,000	December 31, 2006

Acquisition Projects: **APN(s):** n/a
 Acreage: n/a

I certify that the information contained in this Grant Application form, including required attachments, is accurate.



Signature of Authorized Representative

March 16, 2006
Date

Form SMM-001